Planning for ideal communist cities: the theory and practice of Soviet planning

The form and structure of the ideal communist city

To plan and build cities which, in their form and physical layout, reflect and mould new social relationships between people in a classless, communist society—this is the goal towards which Soviet urban planners have been striving for the past 60 years (Fisher 1962:252 [146], Frolic 1972: 301 [152]). They are pledged to the creation of cities which correct the ills inherited from the capitalist era and which foster collectivism, catering for equal opportunity among all sections of society. In so doing, planners have envisaged that a city, evolving according to welfare criteria and in the absence of class distinction and a land market, will take an urban form whose spatial organization contrasts significantly with that of the archetypal capitalist city. The concentration of capital in the central business district, the sharp differentiation between housing type and quality across the city, and the close juxtaposition of industrial premises and poor quality housing, all manifestations in the built form of social and economic processes in a capitalist society, are to be replaced by physical features appropriate to a society wherein social welfare is to be maximized and market competition for land abolished in favour of state land use planning (Baranov 1975: 710 [130], Baranov and Belousov 1976: 3 [41], Fomin 1975: 45 [149], Frolic 1972: 289 [152], Gutnov 1968: 22 [153], Posokhin 1974: 7 [190], Rodin and Vladimirov 1975: 4 [48], Svetlichny 1960: 29 [200], Thomas 1978: 273 [39], Valentei 1960: 48 [124]).

It is surprising, therefore, that there exists no clear exposition of the ideals underpinning the Soviet vision of the communist city. Yet, to explain this absence we need look no further than the lack of consideration given by Marx, Engels, and Lenin to the principles of urban planning under communism. Whilst they condemned the sharp contrast between the unhealthy polluted and overcrowded slum conditions of working class districts and the leafy, low density suburbs of the professional classes in the 19th century capitalist city, Marx and the early communist theoreticians did not prescribe what form the ideal communist city should take (Johnston 1977: 13 [225], Osborn 1970: 190 [274]). They bequeathed no ready-made Marxist urban planning philosophy. As a consequence Soviet policy-makers and planners have struggled ever since to interpret their meagre writings on the subject and to establish the 'correct' physical form of the Soviet city. It was inevitable, therefore, that during the early years of Soviet government conflicting views should emerge and that a heavy reliance should be placed on the borrowing of ideas from the West (Cooke 1978 [27]).

Notwithstanding the slight consideration given by Marx and Engels to the appropriate principles of spatial organization in the communist city, what little they had to say has pervaded Soviet planning thought to the present day. Their concern to eliminate the distinctions between life in cities and villages and to restrict settlement size remains as a constant thread running through planning theory and practice this century. Engels (Valentei 1960: 48 [124]) maintained that, '... the elimination of contradictions between town and village is not merely possible, it has become an imperative for industrial production, as well as for agricultural production. Moreover it is necessary in the interests of social hygiene'. He, like Marx, envisaged the removal of the town-country distinction through the fusion of industry and agriculture, based on large-scale production, in a series of small, agro-industrial towns spread, almost uniformly, across the country (Johnston 1977: 139 [225], Valentei 1960: 48-50 [124]). The proposed solution, whilst freeing agricultural workers from the 'idiocy of rural life' by transforming them into a form of industrial labour, has the additional advantage of avoiding the evils of slums and pollution, engendered by the growth of large cities. This emphasis upon the establishment of small cities highlights the distinct ambivalence of Marx towards the city; on the one hand urban growth helps to raise living standards for rural workers but, on the other, it brings capital and workers together in sufficient quantity to sharpen capitalist contradictions (Johnston 1977: 12 [225]).

During the period of intense debate between 1928 and 1931 over the 'proper form' of the communist city, the notion of uniting town and country became a key issue (Cooke 1978 [27]). In broad terms, the question was posed as to whether there should be relatively unchecked metropolis, or a union of town and country in dispersed settlements linked by modern communications (Cooke 1978: 361 [27]). Though generally considered by most Western commentators to be a matter of debate between two pressure groups, the 'urbanists' and the 'disurbanists' (Bliznakov 1976 [23], Cooke 1978 [27], Lubetkin 1932 [30], Parkins 1953 [33], Shvidovsky 1970 [34], Starr 1976 [37], 1977 [38], Thomas 1978: 273-5 [39]). Cooke 1978: 361 [27]) interprets events as a disagreement between three groups, each proposing a different alternative form of the city. One group, termed the 'hyper-urbanists', favoured relatively unchecked metropolis. In contrast, the 'urbanist' faction proposed dispersed settlements of strictly limited size, each consisting of relatively few, large, compact 'living blocks' with small community buildings scattered between them 'in the green'. A third group, the 'disurbanists', proposed a more complete dispersal of population, housed in a linear, anodal, global village united by modern means of communication.

The urbanist proposals, in seeking to unite town and country in small, technically-sophisticated settlements, housing industrial and agricultural workers under identical conditions, clustered in interconnected groups, most closely matched the thinking of Marx and Engels. It is hardly coincidental, therefore, that it was these proposals which were incorporated in the 1935 Moscow General Plan-a document prepared under the guiding hand of Stalin and the Communist Party of the Soviet Union-which served to resolve the foregoing debate and 'set the standard of basic city planning principles which thereafter became the rule for Soviet city planners' (Parkins 1953: 50 [11]). The open spatial structure of clustered towns proposed by the plan for the Moscow city region had the twin advantages of bringing about the union of town and country, thereby eliminating the disadvantages of each, whilst not abandoning entirely the town which was regarded as essential to the dissemination of the maximum degree of cultural and party political consciousness.

Concern to eliminate the distinctions between town and country can be traced through to the Third Party Programme of the Communist Party of the Soviet Union; this was prepared in 1961, essentially as a statement of ideals and a vision of Soviet society in the future. It is a document which gives only cursory consideration to the tasks of urban construction and environmental improvements, but does propose the ideal that '... elimination of the socio-economic

and cultural everyday distinctions between town and country will be one of the greatest results of communist construction'. This classic Marxian ideal still persists in contemporary notions of a 'unified system of settlement' throughout the Soviet Union (Baranov and Belousov 1976: 4 [41], Jackson 1974: 23 [161], Valentei 1960: 49 [124]), a concept harking back to the urbanist proposals in its emphasis on controlled industrial and population growth in small and medium-sized towns as the means to encourage the spread of urban influence throughout the countryside and to provide the settlement framework whereby man can be 'harmoniously merged with nature' (Khodzhayev and Khorev 1972: 91 [83]).

The continuity of thinking about appropriate Soviet patterns from Marx to the present day is not matched in literature on the internal structure of the city. In the absence of a coherent statement of ideals one must rely on piecing together the scanty evidence contained in contemporary writings and on interpreting the proposals of the 1935 and 1971 General Plans for Moscow (Frolic 1976: 276-88 [244], 1976: 295-339 [243], Parkins 1953: 50 [11], Posokhin 1974: 7 [256]). Out of this process emerges a conception of the Soviet city made up of a number of ideals relating to spatial organization: (1) equality of housing conditions in all parts of the city; (2) equality of service provision in all parts of the city; (3) equal mobility for all citizens; (4) a healthy, pollution-free environment made possible by the segregation of non-conforming uses; and (5) efficient functioning of the city through the rational zoning of industrial, residential and recreational land uses. Not surprisingly, Soviet planners and policy-makers give general support to the notion of equality in living conditions throughout the Soviet city. Oshchepkov (1953: 61 [186]), for instance, maintains that, 'The location of public and cultural institutions-schools, hospitals, kindergartens, crèches, clubs and theatres—is carefully planned to ensure equality of service for the entire population'. Similarly, Posokhin (1974: 128 [256]), in his account of the 1971 Moscow General Plan, states that one of the chief aims of the plan is the creation of 'the same living conditions for every Moscow resident'. The importance of achieving equality of living conditions is expressed by Baranov and Belousov (1976: 3 [41]) as the desire to create an urban form which avoids sharp distinctions between different areas, one which provides the physical conditions for an almost uniform social composition throughout the city, avoiding the segregation of different social groups. Fisher (1962: 252

[146]) summarizes this ideal as the aim of fostering conditions in which 'all parts of the city of socialist man will be composed, in theory, of all people—a truly classless potpourri'.

Although the ideals outlined above relating to urban form and structure are rarely, if ever, clearly and unambiguously stated, we can assume that they do comprise the chief elements of a model of the communist city. It is with this model that contemporary Soviet cities can be compared.

Soviet urban planning policies

If it was the 1935 Moscow General Plan which first set the standard of urban planning principles in the Soviet Union (Parkins 1953: 50 [11]), it was the 1971 Moscow General Plan, a plan to transform Moscow into 'a model communist city' (Central Committee of the Communist Part of the Soviet Union 1971: 11 [242], Pearson 1972: 66 [253]), which reaffirmed their credibility in the minds of the policy-makers. The period between the two plans saw remarkable constancy in the policies and design concepts utilized in planning Moscow as a showplace and 'perfect' city. Four principles of outstanding importance can be identified, each with economic and pragmatic justifications in addition to ideological underpinnings: (1) containment of urban growth; (2) functional zoning of land use; (3) self-contained residential zones; and (4) public transport-based mobility.

Since a Communist Party Decree of 1931 (Huzinec 1978: 139 [213]), Soviet town planning authorities have adhered to a policy of restricting industrial and population growth in the larger cities (Blokhine 1967: 135 [133], Frolic 1972: 284 [152], Kucherenko 1960: 16 [165]). It is a policy which has its roots firmly lodged in the Marxist dicta that the differences between town and country should be eliminated and that there should be equal economic development throughout the country. Policy-makers have argued that both goals can be met, assuming the potential control of planning authorities over industrial location (and, by implication, the population size of any town), through a combination of restrictions on the growth of larger cities in the economically well-developed regions of Western USSR and measures designed to channel industrial growth to a series of newly established towns in the under-developed areas of Soviet

Asia. In effect, the intention is to co-ordinate urban planning with the location of industry, a function of regional economic planning, and thereby eliminate the rift between city and village through the establishment of a unified system of settlement across the nation.

Osborn (1970: 201 [218]) gives a concise summary of the additional justifications underlying the policy of restricted urban growth, '... the increasing transportation and utility costs per inhabitant beyond a certain acceptable limit; the increasing difficulty of maintaining environmental hygiene, and the costs associated with it; and the increased commuting distances to work, as well as increased travel distances to recreational areas'. Two concerns are manifest in the framing of a policy to restrict the growth of the larger cities. In the first place there is the desire to create and maintain pleasant, healthy, pollution-free living conditions which, Soviet planners have argued, is a difficult, if not impossible, task in larger cities (Baranov 1967: 209 [223], Osborn 1970: 201 [218]).

Secondly, and of greater importance, is the concern to plan cities of a size which minimizes the costs of service provision and environmental protection. Soviet commentators (Baranov 1960: 38 [128] Baranov 1967: 209 [223], Blokhine 1967: 135 [133]) have traditionally claimed that, as concentrations of industry and people increase in cities, there is a constant rise in per capita costs of transport, public utilities, municipal services, and urban construction. Valentei (1960: 50 [124]) puts this case plainly, 'City planners note that there is a sharp rise in the cost of building and maintaining cities when their size exceeds a certain limit. There is a definite economic limit to the size of cities'. This notion of an optimum size for cities, beyond which they become less economic to manage, has prevailed in planning practice throughout the past four decades. 'Scientifically-devised' city size limits have been proposed and adopted as a means of restricting the growth of large cities and of maintaining them at a level of least cost aggregate capital and operating outlays. Supposedly, this is the level at which the economic and social advantages of large cities can be achieved in conjunction with the creation of a clean and efficient environment and the prevention of pollution, overcrowding and excessive commuting. Estimates of the population limit for a city of optimum size have varied from 20,000 to 350,000, the estimates revealing a noticeable upward trend over time (Baranov 1967: 209 [223], Huzinec 1978: 141 [213], Osborn 1970: 201 [218], Valentei 1960: 50 [124]), a reflection

both of different bases at which efficiency is calculated (depending on the level of economic and technological development assumed) and of the redundancy of earlier estimates, in the light of continued growth of the Soviet Union's larger cities.

Since the 1930s a battery of planning policies and administrative measures has been utilized in the task of constraining urban growth within the acceptable limits specified by the optimum city size principle (Huzinec 1978: 141 [213], Osborn 1970: 214-8 [218]). Measures designed to channel industrial growth away from the larger cities include a ban on the construction of new or the extension of old, industrial premises, whilst the pace and direction of population migration is controlled through a system of labour books and internal passports which requires that workers should be registered before they can obtain a home or a job in Moscow or Leningrad. The planning strategy commensurate with administrative restrictions on industrial and population growth features the designation, around the major cities, of a green belt whose function is to prohibit further outward expansion of the built-up area, and the siting of a series of selfcontained satellite cities, some 50-60 km distant from the old cities, to function as population overspill centres whose raison d'être is a reversal in the trend towards centralization of population and employment.

Both the 1935 and 1971 General Plans for Moscow place considerable emphasis on the functional zoning of land use, an approach to urban planning which has a two-fold justification. In the first place, it enables high standards of sanitation and low levels of pollution to be maintained by means of the segregation of noxious industries and non-conforming uses from residential districts. Secondly, it is an approach to urban spatial organization prompted by the normative, rational mode of planning favoured in the Soviet Union (Bater 1977: 190 [131], Central Committee of the Communist Party of the Soviet Union 1971: 12 [242]).

Soviet planners regard the segregation of heavy industry and residential users and the provision of generous amounts of open space, acting as buffer zones between residential and industrial areas, as of the utmost importance. The 1971 Moscow Plan, for instance, proposes the creation of a unified open space system throughout the city, providing both recreational facilities within easy access of all citizens and the maintenance of a healthy environment. A 50 km wide forest belt is a further measure to prevent further outward expansion

of the city.

Although the segregation of industry and housing was adopted as a policy in the earliest city plans, the proposals of the 1971 Moscow Plan evidence a more flexible approach which no longer enforces strict segregation of uses. Increasingly, the realization that, in many instances, the location of industry and housing on adjoining sites may not be incompatible, has led to land zoning for mixed use. Heavy, noxious industries like the metallurgical, chemical and machine-building trades, which operate on a large-scale, and often with specific locational requirements, are still segregated, but there is a recognition that other, non-polluting, car-dependent, light industries requiring small sites can be safely located in or near residential districts (Baranov and Belousov 1976: 11 [41], Blokhine 1967: 135 [133], Central Committee of the Communist Party of the Soviet Union 1971: 11 [242]). Current thinking favours the location of light industry and housing in close proximity in order that commuting times can be kept to an acceptable level (Svetlichny 1960: 32 [200]).

Despite recent modifications in its practical application, the policy of functional zoning of land use is still an essential element of the normative approach to land-use planning in the Soviet Union, necessitated by the absence of land allocation through the market. In lieu of the market, the state holds sole responsibility for the allocation of land to various uses and this it does using planning norms (USSR Council of Ministers, State Committee for Construction 1961 [51]) as convenient yardsticks of the minimum, acceptable levels of land take-up by each urban activity (Bater 1977: 252 [131]). These norms are applied in the planning process for two reasons. Firstly, they offer a crude means of measuring the extent to which land allocation to all the various activities is adequate to meet the defined need and, moreover, to meet the ideal of an equitable spatial distribution of activities. Secondly, their use enables urban land-use layout to be planned as an element of a rational, well ordered planning structure, eliminating non-conforming uses, unnecessary journeys and the inefficient use of land. One implication of the normative style of planning is the inevitability that land allocation, based on 'rational' decision-making within the planning system instead of the complex workings of the land market, will lead to the simplification of land-use patterns. After all, the easiest way to allocate land to a series of uses is to confine each use to a contiguous zone of a size prescribed by the appropriate norm. Unless simple segregation of

uses is employed in this fashion, the business of planning a rational layout for the city becomes unbearably complex, besides which, the overlapping and interlocking pattern of land uses and activities, typical of Western cities, is criticized and shunned by Soviet planning authorities as being an irrational and inefficient urban layout. It is their view that functional zoning is the most rational and efficient means of allocating state-owned land in the pursuit of an adequate urban planning structure for Soviet cities (Rodin and Vladimirov 1975: 239 [48]).

The concept of residential self-containment continues to have currency in Soviet planning at the district and neighbourhood scales. The 1971 Moscow General Plan proposes the creation of eight selfcontained planning zones, each of 1 million population, and each with a full complement of retailing, educational, recreational and other social services, and a balanced mix of employment and housing, the provision of which should decentralize Moscow life, giving the city a new, polycentric structure (Frolic 1976: 276-88 [244], 1976: 295-339 [243], Pearson 1972: 65 [253], Posokhin 1974: 102 et seq. [254]). If such a planned structure can be attained the average journey-to-work distance will be radically reduced and the need for lengthy trips to the historic centre of the city eliminated for all but visits to theatres, museums, the University, and government buildings. Between each residential zone the plan makes provision for considerable 'green wedges' whose dual purpose is to supply recreational facilities and to preserve the self-containment of each zone. Internally, each zone is to be composed of three or four residential districts each, in turn, comprising several microdistricts (microrayons), the spatial units of self-containment, at the neighbourhood level. Similar proposals are contained in the 1966 General Plan for Leningrad which outlines 14 regions each of 200,000 to 300,000 population and each divided hierarchically into residential districts and microdistricts (Shaw 1978: 189-91 [195]).

The emphasis placed in the Soviet Union on self-containment within planning zones seems to suggest that the intention is to create an urban planning structure which not only provides facilities equally throughout the city but also engenders, as nearly as possible, equal accessibility to services. Additionally, the decentralization of employment and higher level services away from the traditional centre of the city to a number of outlying centres seems also designed to play a part in reducing spatial inequality in access to services (Svetlichny

1966: 12 (202)).

All planning of new residential districts in the Soviet Union has, since the Second World War, employed the microdistrict design concept, a direct parallel of the neighbourhood unit used in the planning of the early British new towns (Blokhine 1967: 136 [133], Fisher 1962: 253-5 [146], Fisher, Pioro and Savic 1965: 31-42 [148], Frolic 1964: 285-306 [268], Jensen 1976: 31-42 [214], Johnston 1977: 3-32 [225], Osborn and Reiner 1962: 246 [185], Tarantul 1962: 264-7 [277]). The microdistrict is a self-contained residential unit, varying in size from 4000 to 18,000 inhabitants (Frolic 1972: 290 [152]), served by a district centre within walking distance (about 400 m) of all homes. Several microdistricts, each providing services required on a daily basis, generally combine to form residential units of about 30,000 to 50,000 population, wherein facilities used periodically are located at no greater distance than 1500 m from any home in the district (Baranov and Belousov 1976: 7 [41]). What appears to have given the microdistrict its credence is the apparent convergence in one concept of ideological, economic, and practical justifications. From a purely practical point of view the microdistrict is ideally suited to the convenient usage of standardized, mass housing construction and to the spatial integration of local social services and housing over a short period of time. Bearing in mind the severe shortage of housing in the Soviet Union throughout this century, the concept has obvious appeal as a means of constructing, rapidly and economically, selfsufficient residential units (Frolic 1964: 297 [268], Johnston 1977: 14 [225], Osborn and Reiner 1962; 246 [185], Svetlichny 1960; 33 [200]). From an ideological point of view the microdistrict has found favour, in one form or another, with Soviet theoreticians (Frolic 1964 [268], Gutnov 1968 [153], Strumilin 1961: 3-29 [276]), apparently because it makes provision for an equitable distribution of services and is conducive to the formation of communal living. In form it is a close approximation of the model residential unit for communal living proposed by the eminent Soviet economist, Strumilin (1961 [276]); many aspects of his notional 'Palace Communes', designed to house ideal communities of 2000 to 2500 people consisting of intensive group associations based on close proximity, everyday contact, and the sharing of employment and leisure time experiences, have been incorporated in actual microdistrict plans. Strumilin's concern for shared kitchens, and cultural and educational services provided on a communal basis, emphasizes the importance of community and

collective life, and points up the underlying rationale to 'eradicate extreme individualism and egotism' (Zhuravlyev and Fyodrov 1961: 39 [278]).

Practical application of the microdistrict concept is an attempt to create, within a clearly bounded geographical area, a community based on the common identity engendered by the shared use of facilities, and as such, it is a prime example of the deterministic nature of much Soviet planning. It marks an attempt, at the neighbourhood scale, to influence and foster, through the design of a particular built form, the social relationships appropriate to a new social order.

In the Soviet Union the highest priority in transport planning has consistently been accorded to the planning and development of integrated public passenger transport systems in all the major cities. It has been assumed that public transport will carry the bulk of the passenger traffic and, indeed, statistics for 1975 emphasize the dominance of public over private transport in that some 50 billion passengers were transported by public modes, amounting to over 90 per cent of total passengers carried by all modes of transport (Rodin and Vladimirov 1975: 19 [48], Sigaev and Shelkov 1976: 6 [325]). By comparison cars, including publicly-owned taxis and government vehicles carried a mere five billion passengers. Traditionally, Soviet policy-makers have maintained that transport should be collectively owned, planned and operated and, until the 1960s, there was never any question that this was not to be so because cars were restricted to official use, the government having determined that the unrestrained proliferation of private cars was an irrational use of resources and, therefore, to be suppressed (Hunter 1968: 115 [320]).

Attempts to reduce spatial inequalities in urban mobility have focused on the creation of a comprehensive network of public transport services utilizing all modes, including trolleybuses, buses, trams, and underground railways. Underlying this massive investment in public transport is the basic premise that the low rate of car ownership, combined with low fares, should ensure heavy loadings, a virtual monopoly position for public transport, and thus a revenue surplus (Daly 1977: 279 [315], Grava 1976: 250 [317], Sallnow 1976: 675 [324]). On a practical level the distribution of transport routes, the provision of transport stopping points at regular intervals and the improvement of journey times from suburban areas to city centres, made possible by express services, have all been important elements

in the attempted creation of equal accessibility throughout the Soviet city (Daly 1977 [315], Grava 1976 [317], Watson 1977 [329]).

Soviet progress towards the ideal city form

We may assume that the package of planning policies, outlined above, if implemented to the letter, would help to create a city closely resembling the physical form of the ideal communist city envisaged by Soviet policymakers. Thus, the extent to which these policies have been applied successfully might be taken as a reasonable indication of progress made in the transformation of Soviet cities to the idealized form. Additionally, we may assume that a comparison of contemporary Soviet and Western cities might also furnish a measure of the degree to which Soviet cities have evolved towards the ideal form.

THE IMPLEMENTATION OF PLANNING POLICIES

No matter how successfully policies have been applied in the Soviet Union it would be unrealistic to expect that urban planning, in the years since the first formal plan of 1935, could transform the spatial organization of cities, much less the society of which they are a part. The country is still moving through a period of socialist transition, characterized by inequalities, economic and social features which are relics of the capitalist era, and a low level of communist consciousness amongst the population (Valentei 1960 [124]). This proviso notwithstanding, it does seem a useful exercise to attempt to measure the relative success of the Soviet town planning system in the creation of ideal cities.

As far as the policy of restricted urban growth is concerned, the evidence is conclusive that, despite a battery of control measures, employment and population growth has continued apace in the largest cities (Huzinec 1978: 141 [213]). Out of a current urban population totalling 150 million (some 60 per cent of the total population) more than 70 per cent live in cities which are officially termed 'large' (Jensen 1976: 35 [214]). Thirteen cities now exceed a population of a million, there being a trend towards the increased concentration of population in the large in the large.

Moscow's population continues to grow at a rate of about 80,000 per annum; its population in 1970 reached the level forecast for 1981 while the figure for 1977 of 8 million exceeded the level forecast for 1982 by the 1971 General Plan (Osborn 1970: 206-7 [218], Underhill 1976: 36 [203]). Likewise, Leningrad with a current population of 4.4 million exceeds the level forecast for 1990 by the 1966 General Plan for the city (Shaw 1978: 188 [195]).

Such was the planners' inability to control urban growth that, by the early 1960s, the validity of the notion of an optimal city size was being openly challenged. Perevedentsev (1969: 8-9 [220]) a most outspoken Soviet critic, dismissed arguments supporting the concept in his claim that, 'the state policy of regulating the growth of cities must be based on a precise knowledge of the relative shortcomings and advantages of cities of various sizes and types. To do this it is necessary to study the economic, social, demographic, public health and other aspects of the growth of cities'. The crux of his argument rests on the exact meaning of the hitherto loosely-defined term 'optimum city size'. Taking as his criterion of optimality that size which yields the highest productivity of labour and the highest return on assets, he suggests that the available information points to the attainment of the highest productivity in the larger cities. His calculations imply that the productivity of industrial labour in cities with a population greater than 1 million is 38 per cent higher than that in cities of population between 100,000 and 200,000, there being a return on assets of greater than twice as high. Moreover, he argues, larger cities can be administered as easily as small ones and have the additional advantage that it is precisely in these cities that the lowest housing costs and fastest rates of construction are attained.

Peredentsev's attack, backed as it was by other Soviet commentators (Pchelintsev 1966: 15-23 [219]), amounted not so much to a condemnation of the failure, in practice, to attain the ideal city size but rather as a reassessment of the whole concept of limiting urban growth to a specified level and of containing the physical spread of cities within well defined limits. During the 1960s his line of argument ment came to establish itself as the new orthodoxy and, increasingly, planning authorities turned to the notion of urban agglomerations or 'urban regions' as a replacement for the optimum city size concept (Pchelintsev 1966 [219], Svetlichny 1966: 12 [202]). However, the policy of strict control of urban growth still has some adherents. Khorey (quoted in Berry 1079 [910]) for instance has around that

continued attempts should be made to develop new forms of controlled urbanization consistent with the tenets of Marxism-Leninism; the settlement pattern he favours coincides with Marx's vision of a unified, clustered pattern of small towns throughout the country.

The Soviet failure to curb urban growth has its roots in rather more fundamental aspects of the Soviet political and economic system than the mere miscalculation of optimal city size, and it is pertinent, at this point, to digress a little and explore some of the reasons for the limited success of the policy to restrict urban growth. The first and foremost reason for the inability of urban planners to restrict growth is the overriding Soviet concern for rapid economic growth (Bater 1977 [131], Huzinec 1978 [213]); the repercussions of this concern include preference to industrial development to the detriment of environmental considerations, lack of investment in town planning (Fisher, Pioro, and Savic 1965: 38 [148], Osborn 1970: 193 [218]), and the abandonment of long-term planning ideals in the face of the short-term needs of industrial production (Bater 1977: 188 [131], Frolic 1976 [244], Huzinec 1978: 144 [213], Osborn and Reiner 1966: 248 [185]). Huzinec (1978 [213]) pinpoints two links between industrial decision-making and the continuance of urban growth. First, since the objective function of the Soviet economy has been to industrialize as rapidly as possible, it has become expedient to locate factories and offices in the larger cities where urbanization economies, economies of scale and the benefits of established social overhead capital can most easily be garnered. The attraction of the larger cities is overwhelming because not only do these cities offer large labour supplies, necessary to the achievement of economies of scale (made possible through large-scale production) and the opportunity for industrial linkage within the same locality, but also the cultural, social and housing facilities essential to the attraction and retention of labour. In addition, industrialists favour large cities because, generally, the location decision is based on finding the minimum cost location, where labour and capital are considered the most important factors. These factors of production are most plentiful in the larger cities which also have the added advantages of good accessibility and the existence of potentially large markets (Huzinec 1978 [213]).

Secondly, the dominance of sectoral planning over territorial planning, an inevitable consequence of the greater power and influence accorded to industrial ministries over town planning agencies, has

resulted in a situation in which the production interests of these ministries tend to override most objections to investment in the larger cities. Planning authorities appear to have found it an impossible task to implement city master plans and to enforce urban growth restrictions when faced with the conflicting priorities of powerful industrial enterprises who, set with ambitious production targets, show little regard for carefully prepared master plans. Industrial ministries are assured, through their greater political influence, of locating factories where labour is available and where infrastructure costs are least, even if this means contravening designated land-use zoning (Andrusz 1976 [279], Osborn and Reiner 1966: 241-2 [185], Svetlichny 1960: 33 [200], 1966: 11 [202]).

As a direct result of the strong political backing given to the forces of industrial growth, larger cities have continued to expand rapidly in spite of restrictions imposed by urban planning authorities (Svetlichny 1960: 30 [200]). Small towns, by comparison, continue to grow slowly as a result of their relative disadvantage with respect to political influence, labour supply, size of market, accessibility, social and cultural facilities and expertise (Huzinec 1978: 146 [213], Lyubovny and Savelyev 1977: 7 [217]). Industrial investment is difficult to attract to small towns, and whilst this situation persists there seems little likelihood that a unified system of settlement, removing the distinction between town and country, can be created. The trend towards increased centralization of employment, services and population in the larger centres, particularly Moscow and Leningrad, seems likely to prove a difficult one to reverse, for as Huzinec (1978: 147 [213]) puts it, 'a cumulative causation process is started which acts to strengthen existing centres of industrial concentration since it is these points that are politically most powerful, given a country where industrial power is synonomous with political strength'.

An explanation of the persistent growth of large cities cannot rest entirely on its attribution to industrial employment growth. Population growth through in-migration from rural areas has been an important factor. The regulation of migration has, on the whole, proved to be ineffective, such are the attractions of better employment opportunities and educational, cultural, social and housing facilities. Where regulation has achieved success, labour shortages have arisen necessitating long distance commuting from outlying to the larger centres, by those people unable to obtain

passports to live in the cities themselves.

A large measure of unforeseen employment growth, which eluded the control of urban planners, is that brought about by increasing sophistication of the Soviet economy, with the swing away from production to tertiary employment. Under Soviet conditions, the major growth sector of science and research favours a large city location because these are the very centres of technical innovation and progress. It is here that the educational and research facilities and skilled labour necessary to attract 'science' industries are located (Huzinec 1978: 146 [213]).

This evaluation of urban containment policies must conclude that their implementation has been relatively unsuccessful. They have failed not only to bring about the hoped-for fusion of town and country, but also have had only limited impact in preventing the negative features of large city growth. Industrial enterprises locating in large cities rarely take the external diseconomies of congestion into account and these, even if included in the 'location decision', are not usually sufficient to offset the external economies of agglomeration. Inevitably, the outcome for major cities in the Soviet Union is one of increasing transport and utility costs per inhabitant, increasing difficulty in the maintenance of environmental hygiene and increasing length of commuting journeys, the very features of urban life that restrictive policies were intended to tackle (Divilov 1969 [211], Huzinec 1978: 144 [213], Osborn 1968: 559 [183], Vasilyev and Stolbov 1977: 9 [344].

The Soviet planning system appears to have had only mixed success in its attempt, through functional zoning of land and segregation of non-conforming uses, to create and maintain a healthy, pollution-free environment and an efficient layout of land uses. On the credit side, Bater (1977: 198 [131]) observes that the sharply defined edge of the built-up area of many cities and the absence of an untidy urban fringe represent a direct improvement in aesthetic appearance and, to some extent, an improvement in the efficiency of peripheral urban land use resulting from rational land allocation procedures. On the debit side, there is some evidence to suggest that the frequent neglect by industrial enterprises for environmental considerations, in particular the zoning requirements of city master plans, has caused noxious industrial uses to be located close by residential areas, bringing about a corresponding deterioration in environmental quality (Bater 1977: 198–9 [131]). Moreover, enter-

prises, empowered to build housing, have often done so but in locations contrary to those specified by land use plans.

On grounds of efficiency in the use and development of land Bater

On grounds of efficiency in the use and development of land Bater (1977: 189–9 [131]) is critical of the excessive over-allocation of land that has occurred in a number of cities, which he attributes to the poor co-ordination between land allocation and development brought about by the rift between town planning agencies responsible for the former and industrial ministries which monopolize the latter. Until such time as quantified data on the distribution of land uses and levels of pollution are more readily available judgement should be reserved on the degree of success in enhancing urban environmental quality achieved by applying the policy of functional land-use zoning.

It would be premature at this time to assess the success, or likely success, of the macro-scale residential zoning proposed by the 1966 Leningrad and 1971 Moscow General Plan. Both plans were prepared for a period of 25 years and it would be unreasonable, even if data were available (which they are not), to compare practice with plans at this stage in implementation. However, a more complete assessment of the practical application of the microdistrict concept is possible. The microdistrict, universally adopted in Soviet residential planning, has proved to be a useful means of enabling the rapid construction of massive apartment blocks and yet, as a result of poor implementation and some false assumptions underlying the concept, has failed to meet the ideals set for it. It was assumed that the microdistrict would be the appropriate residential unit to shape and contain communities derived from social interaction based on propinquity; shared facilities were to form the basis of sociopsychological cohesion (Frolic 1970: 682 [56], Johnston 1977: 24 [225] but, in reality, physical planning at the neighbourhood scale has had less impact on social interaction than the deterministic assumptions underlying the concept led planners to expect (Johnston 1977: 5 [225]). In practice, inhabitants choose to orient their lives around the workplace rather than around their neighbourhood, seeking community in the diversity of the city as a whole in preference to the more limited geographical neighbourhood (Bater 1977: 193 [131], Frolic 1964 [268], Hamilton 1978: 515 [111], Johnston 1977 [225]). Increasing mobility, necessitated by lack of local job opportunities, and growing affluence are amongst the factors which served to unfetter residents from restrictions within their

own locality.

To a large extent the inability to create local communities can be attributed to the misinterpretation on the part of planners of patterns of social interaction, but an additional contributory factor has been the usual lag of several years between residential construction and service provision (Frolic 1972: 291 [152], Svetlichny 1966: 34 [202]). This failing in the planning system accounts for spatial inequalities in service provision and ensures that, during the initial period of development, a microdistrict does not develop as a coherent social whole, forcing residents to seek services elsewhere in the city. Bater (1977: 193 [131]) summarizes the fate of those who live in new residential districts: 'although half the urban population is now estimated to live in microrayons, the fact that these are in theory planned and built in an integrated matter is not borne out in practice, and therefore residence in a microrayon is no guarantee of access to consumer and cultural services'. Hamilton (1978: 515 [111]) observes that microdistricts have a tendency to become socially distinct; since their social composition is significantly dictated by the structure of the local job market there tends to be social homogeneity within districts and heterogeneity between them. Thus the weight of evidence certainly suggests that the microdistrict has not, as yet, achieved the ideals of neighbourhood self-containment, equality of service provision, and promotion of community based on a collective consciousness. Frolic (1972: 293 [152]) concludes that this failure to meet ideals has led to the concept being discarded as unworkable but, nonetheless, it would still seem to have a number of economic and practical advantages as a unit for construction purposes.

Every large Soviet city has a well developed, comprehensive, integrated public urban transport system. However, to what extent cities can be said to display equality of mobility or accessibility is impossible to assess. During the late 1960s there began a trend away from reliance solely on public transport, towards a policy based on the 'balanced development' of public and private modes of transport.

Current policy is summarized by Sigaev and Shelkov (1976: 2 [325]) as follows, 'The principal trend in the development of urban transport over the next ten to fifteen years will be to provide optimum planned solutions for the technical, town planning and socioeconomic problems connected with motor transport, making sure that each citizen has the opportunity to enjoy all the advantages of both public and private transport'. Soviet policy-makers now adhere to the reasoning that all transport problems cannot be solved by public transport alone, there being an equal need for public and private transport; to ban the car would be an 'absurd doctrine'. Svetlichny (1966: 14 (202)) captures the mood of Soviet planners, 'True, we favour primary development of public transportation as the most capacious and economical means of travel in a large or even medium-sized city. It is indispensable for providing city-dwellers with transportation to their jobs and back. Nor can there be any doubt that it will keep that role in future. The number of automobiles will grow and is in fact growing now. It is an inflexible command of life, of material and cultural progress, of economics and our growing needs. Freedom of movement is the most precious achievement of culture. And it is not surprising that we have included the automobile in the arsenal of the communist mode of life . . . '.

This change of attitude towards the acceptance of the private motor car as a legitimate means of transport casts severe doubt as to whether the critical assumptions underlying the operation of comprehensive public transport systems are likely to be met in the years to come. Soviet policymakers argue that the balance between public and private transport can be maintained, and the viability of public transport systems retained through the adoption of a number of planning policies and administrative measures, designed, on the one hand, to restrict car usage for journeys-to-work and, on the other, to enhance the competitive advantages of public transport through the retention of low fares and the operation of fast, frequent services (Daly 1977: 279 [315]). One assumes that the ideal of equality of mobility and accessibility remains the same.

The foregoing evaluation of progress in the implementation of planning policies suggests that the attainment of an ideal communist city form by Soviet cities is, as yet, a long way off; policies have made little apparent impact on the traditional urban form, inherited from the capitalist era. Bater's (1977: 203 [131]) assessment of the state of Soviet town planning seems a fair one: '... principle and practice are not yet congruent. Perhaps this should not be expected: yet in the Soviet Union great stress is placed on benefits accruing from a successful parameters and a fixed planning.

successful normative style of town planning'.

SOVIET AND WESTERN CITIES COMPARED

We have established that contemporary Soviet cities do not, in

physical form and layout, accord with the ideals of a truly communist city. As Western cities and communist cities are, in theory, shaped by different principles of spatial organization it should be possible, by comparing their respective urban forms, to gain some insight into the progress made in the Soviet Union towards the achievement of ideal communist urban forms. The 'Western city' would more correctly be termed the 'Western planned city', a product of a mixed economy, wherein land is allocated by a modified market and in which the state exercises control over the use of land through its ownership of all development rights. Market processes are modified specifically in the zoning of land for particular uses, often regardless of land values, in the designation of green belts (in which development is severely restricted) and in the segregation of non-conforming uses. Also vested in the state are powers of compulsory purchase for use in pursuit of housing and environmental improvement; state intervention in the market for housing and social facilities is another characteristic of a Western mixed economy. In its principles of spatial organization the Western planned city, with which Soviet cities are compared, differs immensely from a city originating in a laissez-faire market economy. In a number of ways the morphology and internal structure of Soviet and Western cities appear to differ, namely: (1) social segregation; (2) spatial pattern of population density; (3) city centre function; and (4) uniformity of physical form.

Examining firstly social segregation, Soviet cities, in contrast to Western cities, show far less areal differentiation of social groups and much less extreme variations between different areas of the city in the quality of housing and in the level of service provision (Hamilton 1978: 515 [111]). At the apartment block scale there is quite considerable variation in the quality and condition of housing and concomitant segregation by income and occupation but, at the city-wide scale, there is a remarkable degree of social homogeneity. Apparently, social mixing at the street level takes place as the inevitable outcome of the prevailing shortage of housing which ensures that households have only a limited choice about their place of residence (Hamilton 1978: 515 [111]). Moreover, any one street is likely to have housing blocks which vary in age and condition and thus attract residents from across the social spectrum. It is clear, however, that mixing of social groups within blocks or streets brings about only limited interaction between the various groups, each with their distinctive needs, preferences and patterns of behaviour.

Turning to the spatial pattern of population density, there are points of difference between Soviet and Western cities. The population density profile of the Western city is typically composed of a crater at the centre, marking the low density of the central business districts, peaks on either side of the crater, representing the highdensity ring around the central business district, and thereafter gently declining slopes, illustrating the ever-declining densities to the edge of the city, except for occasional peaks representing suburban service centres. Apart from the concentric zone around the city centre population densities are not generally high. The data on Soviet cities, though partial, do display a pattern of population densities which contrasts with that of the Western city; the crater at the centre of the density profile is much less marked whilst the presence of two peaks flanking this hollow reveals the high population density of the inner ring (Jensen 1976: 38 [214]). Thereafter, the density profile flattens, showing the uniformity of population density to the edge of the city. As a general rule, Soviet cities have much higher overall population densities than cities in the West.

The explanation for the greater population densities of Soviet cities lies in the existence of vast areas of modern multi-storey apartment blocks which stretch from the historic centre to the edges of the city in most of the major cities. Old low-rise housing still remains, largely because of the housing shortage, but is located only in the city centre where, because of overcrowding, it accounts for the high population densities of central areas. The predominance of high-rise housing throughout the Soviet city contrasts strongly with the American or British situations, in which low-rise dwellings dominate the suburbs outside the high-density inner city, but has more in common with West European continental cities in which low-rise apartment blocks form the chief mode of residential construction. Highrise, high-density construction is preferred in the Soviet Union for a number of reasons. Firstly, it is more economical than low-rise housing in that it permits mass construction using industrialized building techniques, from which economies of scale accrue. Additional economies can be achieved through a reduction in the surface area of the city, because an increase in surface area raises proportionally the costs of servicing and providing infrastructure, so a reduction in area realizes economies (Underhill 1976: 73-5 [203]). Secondly, high-density residential areas are planned with the intention of encouraging working class solidarity and promoting a com-

mon, collective spirit. Thirdly, it is argued that high-rise construction mon, collective spirit. Hilldry, it is a general and to be freed for open space, and for recreational permits more land to be freed to specific facilities, than would be the case with low-rise development (Posokhin 1974: 101 [190]).

Differences in the form of population density profiles are ac-Differences in the form of population action, profiles are accounted for by the different patterns of urban development in Soviet and Western cities. The ever-decreasing density outwards from the central area of the Western city reflects the process of suburbanization and urban sprawl, associated with higher car ownership and a preference for low-density, low-rise housing. This pattern of development contrasts strongly with that of the Soviet city in which high-rise housing spreads right to the sharply-demarcated edge of the city (Jensen 1976: 38 [214]). Suburbanization and the concurrent decline of population density in the inner city, a trend typical of the Western city, is one not yet manifest in the Soviet city.

Western city centres, dominated by the central business district, are characterized by the intensive use of land and the predominance of high-rise development. Soviet cities, in contrast, have virtually no commercial function, their role being primarily that of a 'politicocultural-administrative' centre (Fisher 1962: 253 [146]); the city centre serves as a setting for the principal public buildings and monuments, grandly designed and spaciously laid out. Residential uses are not uncommon and the general lack of competitive functions is reflected in the absence of advertising, a most common feature of the central areas of Western cities.

The contrast between affluent and poor residential districts and between central and peripheral areas of the Western city adds variety to its physical layout, though a certain degree of uniformity is evident in residential estates. The Soviet city could not be more different; as a result of the use of blueprint designs in residential construction there is a high degree of standardization and uniformity in the urban fabric, with high-rise development the predominant form (Fisher 1962: 262-3 [146], USSR Council of Ministers, State Committee for Construction 1976 [52]).

All in all, the differences in spatial organization of Soviet and Western cities appear to be relatively few and, certainly, fewer than might be expected of two types of planning systems with such different ideological underpinnings. Admittedly, the lesser degree of social segregation in the Soviet city is a major point of difference marking, as it does, an important step towards social homogeneity

throughout the city, an essential characteristic of the ideal communist city. But, this feature apart, what can we make of the apparent similarity between the spatial organization of Soviet and Western cities? Probably the most important factor accounting for this similarity of urban form is the presence of state urban planning both in the Soviet Union and the West. Increasingly over the past two or three decades Western mixed economies have introduced a greater level of state involvement in community processes and environmental planning. In both East and West, planning authorities concerned to improve environmental health, urban aesthetics and the efficiency of land use have been responsible for the allocation of land, the zoning of land uses, the segregation of non-conforming uses and the control of urban growth. Moreover, similar planning principles have been applied in East and West, the explanation for which lies in the existence of a common planning ideology, reinforced by the international diffusion of concepts, primarily from Western Europe to the Soviet Union.

Three common strands of planning ideology can be identified, namely: utopianism, futurism and perfectionism (Cherry, G. E. 1974: 245).† Utopianism, comprising a set of values and ideals, combining social purpose and creativity, has a long history in West European planning and, in the Soviet Union, is most evident in the plans and designs prepared during the period of intellectual ferment of the 1920s. Whilst less easily-recognized in contemporary Western urban planning, utopianism remains as an element of the planners' ideology, though as much less of a driving force than in the Soviet context, where the vision of an ideal communist city remains a guiding light to the planner. Futurism has been a recurrent theme in Western planning, marking a concern to 'embrace the future as an ideal worth striving for as part of man's perfectability' (Cherry 1974: 245). Traditionally the planner has placed himself firmly on the side of 'development', representing progress and human achievement. In the Soviet Union, the planners' faith in large-scale urban restructuring is evidence of this element of ideology. Turning to the perfectionist element—a concern to beautify the physical environment and to eradicate pollution-we might draw the parallel between the pronouncements of leading Soviet and British planners, to recognize the inherent similarity of urban planning as an activity in both countries. Unwin clearly states the British position, 'The true purpose of

[†] Cherry, G. E. (1974) The Evolution of British Town Planning. London: Leonard Hill.

planning . . . is to afford greater and wider opportunities for securing the right location of human activities and for creating in our pleasant land an environment more appropriate than any which could possibly result from haphazard development and to foster a new and better order of life' (Cherry 1974: 247). An almost identical view is expressed by Baranov and Belousov (1976 [41]): 'The main objective of urban development of the USSR is the creation of the best conditions for the people's life, work, and leisure. State planning and the absence of private property in land, industrial enterprises, transport facilities, public buildings and apartment houses provide vast possibilities for planning and construction of towns, creating the basis for purposeful development of the whole system of human settlements in accordance with the socioeconomic tasks which are set and with the solution of a most complex problem of rational siting of the country's productive forces'.

Cherry (1974: 249) observes that there are two points of origin for the three vital elements of planning ideology. The first, involving a search for order, amenity and convenience in the physical environment, arose in Britain as a reaction against the slums, pollution and close proximity of noxious industry and housing in the Victorian city. Likewise, in the Soviet Union, the need for planning was prompted by the reaction against the evils of the 'capitalist' city.

Thus, many elements of planning ideology are shared by the Soviet Union and the West, there being a shared concern to create, through a better-organized and better-designed physical environment, a new social order, free from the problems of the capitalist (Victorian) city. Obviously this commonality of interest can be explained, to some extent, by the inherent nature of urban planning as a government activity, but it is the adoption of Western concepts and methods by Soviet planners which has acted to reinforce the similarities. Ebenezer Howard's Garden Cities of Tomorrow (1902) is a common origin for the planning goals and policies of Britain and the Soviet Union. His thinking strongly influenced pioneer British planners including Patrick Abercrombie, who incorporated many of Howard's ideas in the Plan for Greater London (1944), which bears such a striking resemblance to the 1971 Moscow General Plan. Furthermore, Howard's ideas have become known in the Soviet Union through a process of diffusion, initiated by the International Garden Cities Movement in the first two decades of the 20th century (Cooke 1977 [26], 1978 [27], Starr 1971 [37]). This transfer of ideas from the West

to East has continued to the present day.

There is little wonder then that urban planning in Western Europe and the Soviet Union reveals noticeable parallels in approach and achievement, reflected in the similarity of urban form under the two regimes. Whilst the presence, in both East and West of state urban planning, based on similar ideals, largely accounts for the high degree of similarity in the spatial organization of cities, we might still expect Soviet cities, the containers of a communist way of life, to show much greater spatial equality of service provision and accessibility than contemporary Western cities, which as yet they do not. For an explanation of the Soviet failure to create true communist cities we must turn to an examination of town planning in the wider context of the political, economic and social conditions of Soviet society.

The ideal communist city—a viable concept?

Contemporary Soviet cities have progressed little towards the idealized form envisaged by its planners and disparities are evident between urban planning theory and practice (Frolic 1972: 293 [152]). To some extent the continued existence of contradictions and inequalities in the layout of the city and the failure to create distinctively communist urban structures can be explained as the outcome of the current period of socialist transition, during which relics of the capitalist era remain; yet there do seem to be rather more fundamental conditions and trends in Soviet society which account for this situation. At present, societal conditions essential to the creation, through state urban planning, of ideal communist cities, do not prevail in the Soviet Union and seem unlikely to pertain in the future. Five conditions appear necessary to successful communist planning: (1) a low priority accorded to economic growth and large-scale industrial production; (2) comprehensive unitary urban planning; (3) allocation of land according to principles of equity (and not according to the criterion of 'ability to pay'); (4) a classless society; and (5) subjugation of personal needs and preferences to the common good.

When priority is given to economic growth based on large-scale industrial production the inevitable outcome is uncontrolled urban growth, a feature of the capitalist city, but one anathema to the planners of an ideal communist city. Large-scale production, dependent on large supplies of labour and agglomeration economies must, of necessity, be located in large cities; whilst economic growth is a primary goal of society, it seems inevitable that there will be concomitant large city growth and, moreover, environmental planning considerations are likely to be relegated to a position of low priority. It seems that controlled urban growth, envisaged by Soviet

planners, can only be achieved in a society which bases economic growth on small-scale production or which accords a higher priority to environmental ideals than to economic ideals and thus permits higher investment in the former than the latter. Judging by Soviet experience in the implementation of urban containment policies, this condition is not fulfilled in Soviet society, and indeed the intention is that society should become maximally wealthy on the basis of growth in large-scale industrial production. Consequently, the power and resources assigned to industrial ministries, to enable this task to be achieved (see p. 14), far outweigh that of urban planning authorities which, as a result, have difficulty in exercising their legitimate authority over the urban development process. More often than not environmental ideals have been abandoned in favour of economic ideals and this is marked by the inability of a normative style of town planning, based on the preparation of blueprint master plans, to steer development according to the prescribed norms. Without the necessary influence and finance, the capability of land-use planners to control land allocation and development is greatly diminished and remains heavily constrained by an economic and political system which allows sectoral planning to dominate territorial planning (Bater 1977: 188 [131], DiMaio 1974: 70 [143]).

The creation of the ideal communist city requires that the political system should have the capacity for comprehensive, integrated urban planning through an agency which has the absolute power and resources to control all aspects of the development process, over and above the influence of any other department or individual, and to ensure that development proceeds according to communist planning principles. Unless this condition is fulfilled there can be no assurance that development will take place in the form or at a location appropriate to the ideal city form. As we have seen Soviet planning authorities cannot be said to possess the prerequisites to operate a comprehensive planning system effectively. Indeed, it is doubtful, given the complexity of contemporary society, the nature of world economies, and the inevitability of the ultimate expression of private

preferences, that such a planning system could ever be operated

The creation of a city characterized by equity in housing conditions, service provision and access to employment is dependent on the allocation of land according to principles specifically devised to meet this requirement; land allocation by market processes is more than likely to result in spatial inequalities in these aspects of urban than likely to the criterion applied it and allocation suggest that, increasingly, the criterion applied is one of 'ability to pay' (in money or favours) rather than one of equity. Until the 1970s, little attention was paid to the differential value of urban land, on the assumption that all land is equally valuable. More recently, the realization that land in the central area of the city is in much shorter supply than that at the periphery, and the competition between ministries for land which, in effect, increases its value, has promoted the adoption of a procedure to assign values to land (Frolic 1972: 292 [152]). Bater (1977: 202 [131]) describes one such procedure which involves the consideration of some 15 variables of an engineeringconstruction kind and a socio-economic nature and, additionally, the regionalization of the city on the basis of a wide range of criteria including accessibility, level of consumer and cultural services and quality of housing. What emerges from the process is something approaching a land value surface for the city which, for most cities, assigns a 'land value' to the central area three to four times greater than peripheral locations. This trend towards land valuation would seem to suggest that, in future, land is to be allocated to its 'highest and best use'; the more accessible, and thus more highly valued land, should attract more intensive users and/or those able to exert sufficient influence to obtain the land, whilst the less valuable peripheral land is likely to be reserved for less intensive uses. In other words, land-use layout is to be fashioned by the pattern of political influence instead of the principles of equity.

The form of the city reflects the class structure of society and so, if there exist privileged groups in the community who have access to housing and other facilities not available to the rest of society, there will be inevitable implications for the physical layout of the city. As class distinctions engender social segregation and inequality in the provision of facilities, the ideal form of the communist city can only be attained in a truly classless society. In this respect Soviet society,

although much more socially homogeneous than Western societies,

cannot be said to be classless; networks of privilege and patronage favour some social groups more than others, in a society in which the class element stretches beyond the obvious elite of the upper echelons of the intelligentsia. Privileges and restricted access to stores, private homes and personal cars breed inequalities and have a definite impact upon the built form. (For discussion see Smith, H. (1976) The Russians. London: Sphere Books.)

The absolute power of planning authorities, necessary to the control of urban development, assumes that personal needs and preferences with regard to residential, service and workplace location, and mode of travel are subjugated to the common good, as defined by the planner. If private preferences are exercised then those sections of the population with influence and resources are likely to be in a position to provide for their needs whilst the less privileged are less likely to be able to do so, and the outcome is one of inequality. Until the 1960s it would be correct to say that the Soviet government suppressed personal needs in the interests of boosting economic growth and improving the quality of life for society as a whole. Since the 1970s, however, there has been a trend towards increasing privatization in the production and consumption of housing and in the consumption of cars, a trend which has liberated and individualized the needs and preferences of some, generally the more affluent, sections of the community. Doubtless private preferences can be accommodated in an egalitarian communist society in which everyone is unselfish and acts in the best interests of all, but recent trends in the Soviet Union suggest that in the housing and transport sectors, private consumption may reduce the control of planning authorities and, unless communist consciousness can be inculcated in the population, the likelihood is that inequalities will persist. In this respect, trends in the housing and transport sectors are instructive.

In 1974 the private and co-operative sectors of the urban housing stock comprised a not insignificant 26.6 per cent of the total stock and contributed 17 per cent of housing construction in that year (Andrusz 1976: 1 [279]). Though nominally this type of housing is an option open to all sections of the community, in reality the considerable down-payments necessary to secure a government loan restrict access only to the more affluent and influential social groups (Barry 1969: 8 [282]). This differential access to housing which allows only certain sections of the population to exercise private preferences towards housing type has important consequences for the spatial

organization of the 1976: 10-11 [203]). The conv. construction (Barry 1969: 10 [282]) Just shortage, fosters social segregation and the resnortage, tosters socially distinct areas within the city. Housing blocks neighbourhoods come to be dominated by social elites (Hamman and Land) neignbournoods come to be dominated by social entes (riams, 1978: 515 [111], Osborn 1970: 260 [274]) and whilst, as yet, segrega-1978: 515 (311), Osborn 1970. 200 (2/4)) and willist, as yet, segregation is not marked, any increase in the private sector would expand tion is not marked, any increase in the private sector would expand the size of population and number of houses beyond the restrictive the size of population and hamber of mouses beyond the restrictive control of planning authorities, serving to accelerate the process of segregation and to reduce equality in urban living conditions.

Similar trends are manifest in the transport sector. The private ownership of cars is now an accepted fact of life in planning for the future Soviet city (Svetlichny 1966: 14 [202]). Current thinking, which reflects a shift in priorities from those of the early 1960s, favours the controlled growth in production and ownership of cars. This being so, policy-makers are faced with a great dilemma as to the level to which individual car ownership should be allowed to rise. Beyond a certain point widespread car ownership would clearly undermine the assumption that low fares and a virtual monopoly position will guarantee mass usage and, therefore, efficient and economic operation of the public transport system. At the same time there is a counterbalancing argument put forward by Soviet theorists which propounds that private cars, along with private dachas and gardens, are necessary incentives to the workers until such a time is reached when the state can provide these requisites and the populace will no longer wish to have their own (Andrusz 1976: 13 [279], Hunter 1968:

The Soviet goal which proposes the achievement of an acceptable 114 [320]. balance between collective and individual transport is a manifestation of the cleft stick in which transport planners find themselves. They face a critical decision; whether it is wiser to modify ideology and to recognize the popular demand for car ownership, in the hope that this will be the necessary incentive to boost labour productivity and economic growth, the ultimate goal of the Soviet government, or whether to suppress the growth of car usage, as the traditional orthodoxy would suggest. Striking a balance between public and private transport, of necessity, requires a change in ideology which can be justified if cars are considered as a sufficient incentive to raise productivity. This justification notwithstanding, one suspects that the

acceptance of the private motor car, even as part of a balanced approach to passenger transportation, is merely the thin end of the wedge; inevitably, the demand for cars will grow and with it the problems of maintaining a balance between collective and individual transport will multiply. Increasing personal mobility, and the liberation of individual preferences permitted by private car ownership, has important implications for the form of the Soviet city. To take only one example, the concept of self-contained residential zones is unlikely to survive if increased car ownership encourages more users to commute between zones. Without control over the pattern of social behaviour self-containment is no longer a valid proposition. Additionally, inequalities in mobility between social groups would be exaggerated by the inevitable restricted access to car ownership.

Pointers to the future

Town planning has contributed notably to the improvement of living conditions in Soviet cities. Considering the severe practical problems posed by the pressures of burgeoning urban populations, rapid industrialization, wartime destruction and consequent housing shortages, there have been quite remarkable achievements in the realm of housing construction and the development of public transport systems (Jensen 1976: 34 [214]). However, Soviet planners have failed to create cities which could be described as distinctively communist in their form and layout and, indeed, the prevailing societal conditions and current trends in political, economic and social processes suggest that there is likely to be a growing similarity between Soviet and Western cities (Bater 1977: 203 [131]), though the likelihood of the Soviet Union moving towards social democracy is, of course, a matter for speculation.

It could be argued that the prevailing societal conditions which militate against the building of ideal communist cities are merely short-term inconsistencies on the road to communism (Jensen 1976: 32 [214]); in time the conflicts between economic growth and environmental protection, between public and private ownership, and between public and private preferences would be resolved and a true communist society created. On the other hand, it might be suggested that the ideal communist city is not a viable concept and that the conditions essential to its creation are unlikely to be met in Soviet socie-

ty. Large-scale industrial production is likely to remain a high priority and this alone could prevent the ideal communist city from becoming a reality. Industrial enterprises operate in a manner largely independent of urban planning authorities and while this is the case control of urban growth and over industrial location will be difficult to attain. More importantly, perhaps, the Soviet government will be hard pressed in coming years to restrain the growing demand for the exercise of consumer preference in respect of housing type and preferred mode of transport. The release of personal preferences may come to override state-defined planning norms with the result that conformity and equality of living conditions, essential to the attainment of the communist city, are unlikely to pertain. Thus, the more privileged sections of the community could become distinguished even further from the remainder of the population resulting in marked inequalities in living conditions, manifested in the city by spatial inequalities. Recent trends point to a convergence between Soviet and Western society and thus an increasing similarity between the urban forms which express the social, economic and political processes of society. For example, we may point to the privatization of the transport and housing sectors in the Soviet Union and the parallel increase in government control of these sectors in Western mixed economies.

One is left to conclude then, that the ideal communist society is a utopian model of urban form unlikely to be attained in the current climate of Soviet society. The whole history of the failure of utopian planning to achieve its goals is instructive in revealing the great difficulty of moulding man's aspirations and behaviour to fit a preconceived model.† Unless the conditions of Soviet society change markedly in the future the model communist city is likely to become just another in a long line of mythical utopian cities. Much will depend on the path taken by Soviet society over the next few years.

[†]For discussion see Ash, M. (1976) Future fun, in Hancock, T. (ed.), Growth and Change in the Future City Region. London: Leonard Hill, pp 209–13.